

WAC 51-11C-40702 Section C407.2—Mandatory requirements.

C407.2 Mandatory requirements. Compliance with ((this)) Section C407 also requires compliance with those sections shown in Table C407.2.

The building permit application for projects utilizing this method shall include in one submittal all building and mechanical drawings and all information necessary to verify that the building envelope and mechanical design for the project corresponds with the annual energy analysis. If credit is proposed to be taken for lighting energy savings, then an electrical permit application shall also be submitted and approved prior to the issuance of the building permit. If credit is proposed to be taken for energy savings from other components, then the corresponding permit application (e.g., plumbing, boiler, etc.) shall also be submitted and approved prior to the building permit application. Otherwise, components of the project that would not be approved as part of a building permit application shall be modeled ((the same in both the proposed building and the standard reference design and shall comply with the requirements of this)) in the baseline in accordance with ANSI/ASHRAE/IESNA 90.1 Appendix G and in the proposed model in accordance with the requirements of the Washington State Energy Code.

**Table C407.2
Mandatory
Compliance
Measures for Total
Building
Performance Method**

| Section ^a | Title | Comments |
|----------------------|--|----------|
| Envelope | | |
| C401 | Thermal envelope certificate | |
| C402.2.7 | Airspaces | |
| C402.5 | Air leakage | |
| Mechanical | | |
| C403.1.2 | Calculation of heating and cooling loads | |
| C403.1.3 | Data centers | |
| C403.1.4 | Use of electric resistance and fossil fuel-fired HVAC heating equipment. | |
| C403.2 | System design | |
| C403.3.1 | Equipment and system sizing | |

Commented [AB1]: Was this section intended to be referenced as mandatory for C407 pathway similar to 2018 SEC?

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|---------------------|---|--------------------------------------|
| C403.3.2 | HVAC equipment performance requirements | |
| <u>C403.3.3</u> | <u>Hot gas bypass limitation</u> | |
| <u>C403.3.4</u> | <u>Boiler turndown</u> | |
| C403.3.6 | Ventilation for Group R occupancy | |
| ((C403.4 | HVAC system controls)) | |
| C403.4.1 | Thermostatic controls | ((Except for C403.4.1.4)) |

| Section ^a | Title | Comments |
|--|---|--------------------------------------|
| C403.4.2 | Off-hour controls | ((Except for Group R)) |
| C403.4.7 | Combustion heating equipment controls | |
| C403.4.8 | Group R-1 hotel/motel guestrooms | See Section C403.7.4 |
| C403.4.9 | Group R-2 and R-3 dwelling units | |
| C403.4.10 | Group R-2 sleeping units | |
| C403.4.11 | Direct digital control systems | |
| C403.5.5 | Economizer fault detection and diagnostics (FDD) | |
| C403.7 | Ventilation and exhaust systems | Except for C403.7.6 |
| C403.8 except C403.8.1 and C403.8.4 | Fan and fan controls | |
| C403.9.1.1 | Variable flow controls | For cooling tower fans ≥ 7.5 hp |
| C403.9.1.2 | Limitation on centrifugal fan cooling towers | For open cooling towers |
| C403.10 | Construction of HVAC elements | |
| C403.11 | Mechanical systems located outside of the building thermal envelope | |
| <u>C403.13</u> | <u>Commissioning</u> | |

Commented [AB2]: This requires all fans >1 kW comply with the fan power budget, no option to "trade" fan power in the energy model. Should the fan power budgets be excluded from the mandatory requirements of C407 to allow design flexibility?